

Gulf of Mexico Harmful Algal Bloom Bulletin

5 March 2007

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: March 1, 2007

Conditions Report

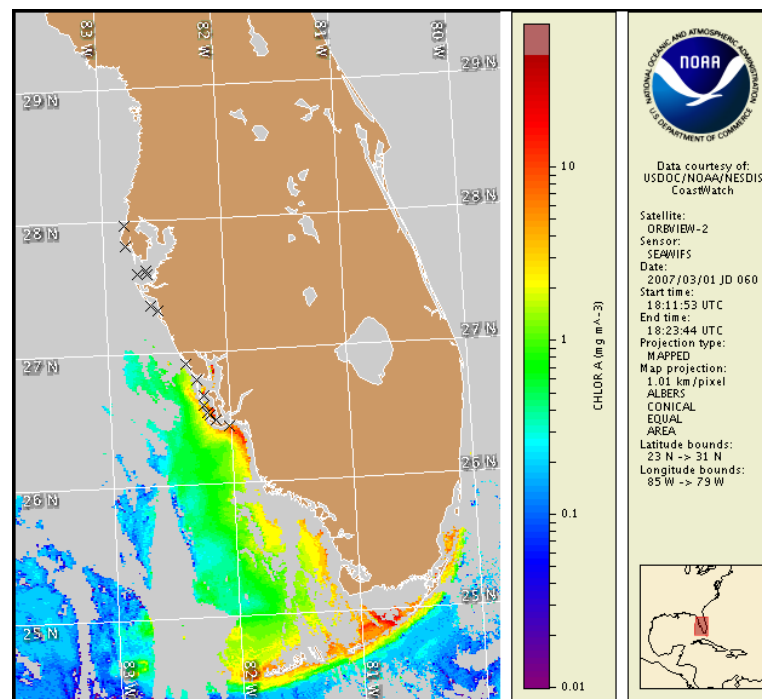
A harmful algal bloom has been identified south of the Lower and Middle Keys in Monroe County. On Wednesday, patchy high impacts are possible in the oceanside Lower Keys region. No other impacts are expected through Sunday in southwest Florida.

Analysis

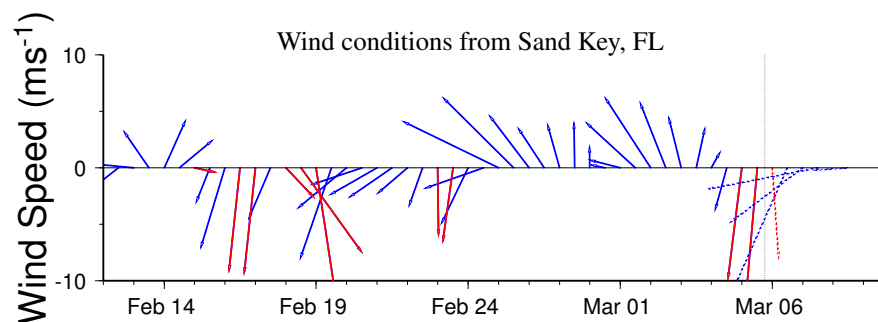
A harmful algal bloom has been identified south of the Keys. Most recent imagery isn't available. Recent sample data from south of the Lower Keys contained up to medium concentrations of *Karenia brevis*. Imagery from March 2 shows a band of elevated chlorophyll, with concentrations around $2 \mu\text{g/L}$, south of the Lower Keys extending from $24^{\circ}28'N$ $81^{\circ}52'W$ to $24^{\circ}31'N$ $81^{\circ}39'W$. Observed winds at Sand Key have been variable since March 2, so the band may still be in this general location. Further sampling is recommended. Westward transport of the bloom is possible by Thursday.

Recent samples off the southwest Florida coast didn't contain *Karenia brevis*. Recent imagery has been obscured by clouds. Upwelling favorable winds are forecasted through Wednesday, which could bring a bloom to the surface.

Bronder, Urizar



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from February 23-March 1 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide: http://www.csc.noaa.gov/crs/habf/habf_bulletin_guide.pdf



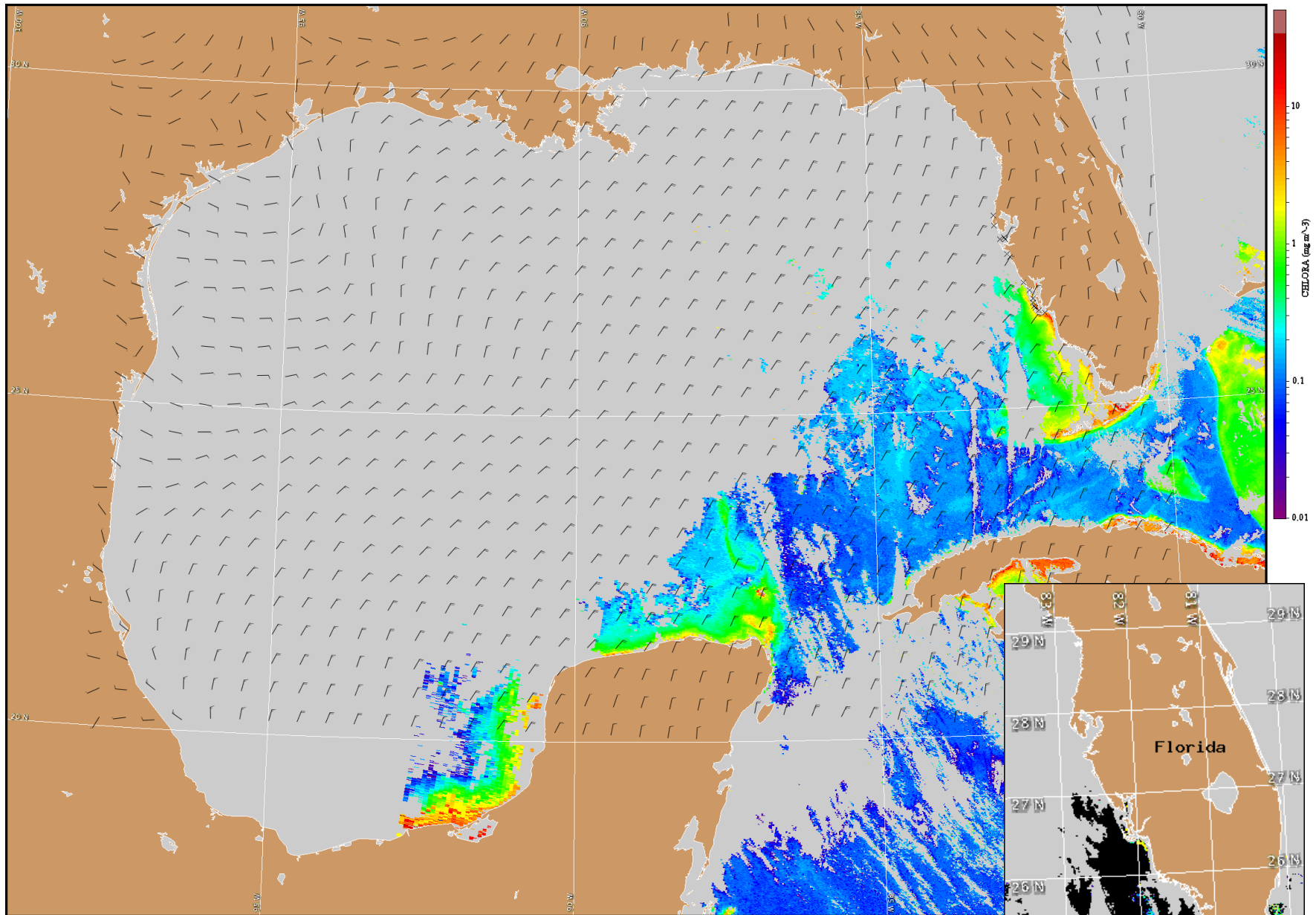
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

Lower Keys: Winds will be north (25 kts, 13 m/s) today, northeast (20 kts, 10 m/s) tomorrow, east (15 kts, 8 m/s) Wednesday.

SW FL: Winds will be north (15 kts, 8 m/s) today, nowtheast (15 kts, 8 m/s) tomorrow, southeast (10 kts, 5 m/s) Wednesday.

Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

1. Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Image products may be published in newspapers. Any other publishing arrangements must receive GeoEye approval via the CoastWatch Program.



Satellite chlorophyll image and forecast winds for March 6, 2007 12Z with cell concentration sampling data from February 23-March 1 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide: http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf

Verified HAB areas shown in red. Other bloom areas shown in yellow (see p. 1 analysis for interpretation).

Wind conditions from Venice Pier, FL

